# **EXPANDING FOAM TAPE SOFT JOINT SOLUTION**

# INSTALLATION INSTRUCTIONS

## GENERAL STATEMENT ABOUT PRODUCT INTENDED USE

Flex-N-Dry™ is an alternative to a common 3-part/ step soft joint, consisting of casing bead, backer rod and sealant. Flex-N-Dry reduces this joint to one material and, in most cases, one step. Flex-N-Dry keeps driving wind and rain out of joints between dissimilar materials. It has the unique capability of letting moisture vapor escape from the building when needed. Flex-N-Dry will also help prevent insects from gaining access to cladding. Flex-N-Dry provides all these features while remaining flexible to absorb movement between dissimilar materials.



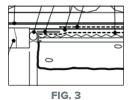


FIG. 1

FIG. 2

#### **TERMINOLOGY**

**Soft Joint:** A general term for a control joint made up of flexible materials and used in a layer of the wall system. Typically consisting of a casing bead, backer rod and sealant. Accommodating movement and minimizing air and water penetration. For the purposes of this document the soft joint would occur in the veneer layer. See figures 3, 4 and 5.







**Control Joint:** A designed break/gap in a layer of the wall system. Its purpose is to accommodate movement between dissimilar materials.

Casing Bead: An accessory used in Manufactured Stone and Stucco for the purposes of controlling thickness of mortar at the perimeter and a to provide a clean straight edge/surface to build a soft joint.

**Backer Rod:** A round, rope-like, filler material having properties that minimize adhesion with sealants. Used to fill a soft joint prior to application of sealant. Its round shape helps form a sealant bead into an hour-glass shape and minimal adhesion allows sealant only 2 points of contact adhesion.

**Sealant** *aka* **Caulk:** The material used to top coat the soft joint to seal out water and block air leakage. Many sealant materials and installation methods exist however this is outside the scope of this document.

**Butt Joint:** A condition where Flex-N-Dry terminates at a 90-degree corner. One side runs past the corner and the perpendicular "Butts" into it.

**Top Coat:** Final step in a 3-part/step soft joint in which sealant is applied over backer rod and then tooled to achieve surface contact and create appropriate joint shape.

#### **ANATOMY OF A "SOFT JOINT"**

What must a Soft Joint do?

- Absorb movement from temperature and moisture level changes in adjacent materials
- Minimize water penetration at transitions between dissimilar materials

Anatomy of a Soft Joint

- · One flat surface
- Preset gap dimensions
- Filler material to absorb movement and resist air & water penetration

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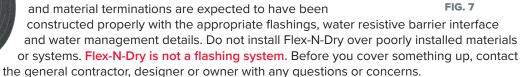
#### FLEX-N-DRY MATERIAL SPECIFICATIONS

Roll Width: 5%"

Flex-N-Dry Tape

Roll Installation Range: 3/8"-5/8"

**Building Code & Construction Statement:** Flex-N-Dry should only be installed on a building that conforms to all local codes and local practices. Material transitions, building penetrations and material terminations are expected to have been



**Transportation & Product Storage:** Store product in original packaging, stacked flat with original wax sheets between rolls. Do not remove roll release tape until ready to use. Remove only what you need and reseal release tape or clip roll to prevent material from expanding before you are ready. Premature expansion will prevent you from using Installation Methods 2 or 3 following.

**Tools Required:** Razor knife, scissors, wide-blade putty knife, and any other appropriate personal protective gear for your specific project.

Additional Materials Required: Shims, scrap foam board or wood strips to use as spacer material if using Installation Method 2 following. This material will be removed/disposed and is not part of final installation.

Preparing Surface for Flex-N-Dry Installation: Soft joint gap

must be between 3%" and 5%" in width. Wall joint depths may vary. Flex-N-Dry will
only fill as deep as the tape's width. Flex-N-Dry dimensions installed will be roughly
as wide as it is deep. See figures 1 and 2. The near square shape provides stability
and maximizes, air, water, UV and fungi resistance. The surface to which Flex-N-Dry
will be adhered should be dry and clean. This bond is only critical until Flex-N-Dry
has reached full expansion. Shims may be used to secure Flex-N-Dry temporarily
while it expands. See figure 9. Note: A joint or section of a joint wider than 5%" can
be filled with two back to back pieces of Flex-N-Dry but do not exceed 7%" total
width. If the section of double material will only occur during a small section of
your joint, miter the ends of your second piece to feather it and not cause a gap
at end of shorter piece.



FIG. 9



FIG. 10

#### **GUIDING PRINCIPLES OF SUCCESS WITH FLEX-N-DRY**

- Do not stretch Flex-N-Dry. This will result in gaps between pieces once material expansion has occurred. Cut tape up to 1½" long to minimize gap risk from stretching.
- Start your installation at bottom of joint and work up.
- All corner joints greater than 45 degrees must be Butt Jointed. Do not attempt to bend material around 90 degree corners. Tape will not expand. See figure 14.
- Consider keeping rolls in a cooler/ice during hot weather. This will slow material expansion and is recommended while using Installation Method 2 and 3.



FIG. 11

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## **EXPANDING FOAM TAPE SOFT JOINT SOLUTION**

# INSTALLATION INSTRUCTIONS

#### **GUIDING PRINCIPLES OF SUCCESS WITH FLEX-N-DRY** Continued

- When starting a new roll, remove the first 1½" of material and discard. Due to manufacturing methods that material will not expand fully.
- When installing Flex-N-Dry on a radius smaller than 10" please refer to Installation Method 3. Failure to follow Method 3 may lead to excessive gap and reduced product expansion.
- If cool temperatures are retarding Flex-N-Dry expansion, after placement, you may gently warm the material with a hair dryer or heat gun on low setting. Keep heat 12"–16" away and keep moving to avoid melting tape. Warning do not exceed 150° F.
- Flex-N-Dry may be installed at temperatures 0°–100° F. Installation temperature conditions impact Flex-N-Dry expansion rate. Flex-N-Dry will reach full expansion within 24 hours, usually much sooner. Choose a small location to test the material and observe expansion rate. Adjust your Flex-N-Dry material storage accordingly; cooler to slow expansion or warmer to speed expansion. Slower expansion is desirable if using Installation Method 2 or 3. See figure 11.

#### **INSTALLATION OPTIONS**

# **METHOD 1: Installation Prior to Veneer Application**

After scratch coat installation is complete but prior to veneer installation, unroll just enough Flex-N-Dry expanding foam tape for window frame or trim. Remember your corners will require Flex-N-Dry to be cut to create a Butt Joint.

Example: If you are working on a window, remove enough Flex-N-Dry for a window jamb. Complete that installation and repeat for next window element. Dry fit for size prior to removing the Flex-N-Dry release tape. Flex-N-Dry adhesive





FIG. 12

FIG. 13

surface must be adhered to the side of window frame or trim so that it may expand toward the stone. Remove release tape and stick Flex-N-Dry. Flex-N-Dry will immediately begin to expand. In this application it can/will reach full expansion prior to veneer installation. Now veneer units may be adhered to wall and pressed against the foam tape compressing it to desired joint width, somewhere between  $\frac{3}{6}$ "- $\frac{5}{6}$ ". See figure 13. Continue following same method for all locations requiring a soft joint.

#### **METHOD 2: Installation After Veneer Application**

Installation Method 2 is used to create a  $\frac{3}{8}$ " –  $\frac{5}{8}$ " gap in a stone profile that traditionally has larger mortar joints. Examples include irregular and round stone textures.

Identify all locations requiring a soft joint treatment. Install a temporary spacer of scrap material at soft joint locations. See figure 8. The material should be of a thickness that matches the desired joint width (3/6"–5/8"). While nearly any material will do, foam and plywood scraps are common. Once spacers are installed complete the installation of the veneer system all the way through the grouting step. Remove spacers and clean any remaining debris from the gap created by the spacer. See figure 14.





FIG. 14

FIG. 15

**Note:** Timing of spacer removal is important. You want the mortar to be cured enough so it won't be dislodged during spacer removal but not yet firmly bonded to your spacer material. Timing will vary depending on which spacer material you are using.

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## **EXPANDING FOAM TAPE SOFT JOINT SOLUTION**

# INSTALLATION INSTRUCTIONS

#### **INSTALLATION OPTIONS** Continued

#### METHOD 2: Installation After Veneer Application Continued

Unroll enough Flex-N-Dry for a section of soft joint. While you get used to the material it is recommended you work with smaller pieces at first. Start at one end of your gap and push the Flex-N-Dry into the gap oriented so that it's adhesive surface is toward window, trim or other prepared surface. Use a wide-blade putty knife to assist in placement of material and to press the Flex-N-Dry so the adhesive makes contact with prepared surface. See figure 15.

#### **METHOD 3: Tight Radius Application**

Tight radius (10" radius or smaller) applications require a modified installation technique and are generally done using 4 separate pieces of Flex-N-Dry. Keep in mind all four corners will utilize a Butt joint. Cut two pieces of Flex-N-Dry at the width of the radius gap. Remove the release tape and place these pieces, oriented with adhesive toward veneer, not the radius penetration, at the top and bottom. See figure 16. Repeat the process for the two side pieces, cutting them shorter (generally 1¼" shorter). See images at right. If you have oriented the Flex-N-Dry correctly all four pieces will be expanding inward toward your pipe or other small radius penetration. See figure 17.



FIG. 16

#### **GENERAL INFORMATION**

- Cleaning—use only a paint brush or other semi-soft bristle brush to remove dirt or crumbly uncured mortar. Do not clean with the direct stream of a power washer.
- Acrylic paint, masonry stain or a caulk/sealant product may be used to top coat Flex-N-Dry to change the color appearance if desired. Please note these materials will impact the moisture vapor permeability of Flex-N-Dry and may have impacts on warranty coverage.



FIG. 17

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